

CLAIMS

What is claimed is:

1. A method of executing operations on virtual metadata, comprising:  
releasing a lock on the virtual metadata if relocation of a required metadata server is underway during execution of the operations on the virtual metadata.
2. A method as recited in claim 1, wherein the virtual metadata is formed as a private data chain, and said method further comprises locking a pointer to the private data chain prior to linking to a first item of private data in the private data chain.
3. A method as recited in claim 2, further comprising waiting, after said releasing, for availability of a lock on the pointer to the private data chain upon completion of relocation of the metadata server, before continuing with execution of operations on the virtual metadata.
4. A method as recited in claim 3, wherein said releasing, waiting and continuing execution of operations on the virtual metadata after relocation of the metadata server are performed transparently to users.
5. A method of relocating a metadata server in a network of computer system nodes in which DMAPI has been implemented, comprising:  
retargeting objects on the computer system nodes accessing a current metadata server to a new metadata server; and  
releasing a lock on virtual metadata when relocation of the metadata server is underway during execution of operations on the virtual metadata.
6. A method as recited in claim 5, wherein the virtual metadata is formed as a private data chain, and said method further comprises locking a pointer to the private data chain prior to linking to a first item of private data in the private data chain.
7. A method as recited in claim 6, further comprising waiting, after said releasing, for availability of a lock on the pointer upon completion of relocation of the metadata server, before continuing with execution of operations on the virtual metadata.

8. A method as recited in claim 7, wherein said releasing, waiting and continuing execution of operations on the virtual metadata after relocation of the metadata server are performed transparently to users.

9. A cluster of computer systems, comprising:

storage devices storing at least one file;  
a storage area network coupled to said storage devices;  
at least one metadata server node, coupled to said storage area network  
metadata client nodes, coupled to said storage area network, to release a lock on virtual metadata when relocation of said at least one metadata server is underway during execution of operations on the virtual metadata.

10. At least one computer readable medium storing at least one program embodying a method of operating a cluster of computer system nodes, said method comprising:

releasing a lock on the virtual metadata if relocation of a required metadata server is underway during execution of the operations on the virtual metadata.

11. At least one computer readable medium as recited in claim 10, wherein the virtual metadata is formed as a private data chain, and said method further comprises locking a pointer to the private data chain prior to linking to a first item of private data in the private data chain.

12. At least one computer readable medium as recited in claim 11, wherein said method further comprises waiting, after said releasing, for availability of a lock on the pointer to the private data chain upon completion of relocation of the metadata server, before continuing with execution of operations on the virtual metadata.